

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: GAL EHRLICH G.E. EHRLICH (1995) LTD. 28 BEZALEL STREET 52 521 RAMAT GAN ISRAEL	<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;"> RECEIVED FILED 01/22753 </div>
--	---

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

Applicant's or agent's file reference 01/22753	Date of Mailing (day/month/year) 11 JUL 2002
International application No. PCT/IL01/01080	International filing date (day/month/year) 22 NOVEMBER 2001
Applicant CARDIMMUNE LTD.	

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:
 The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
 1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90 *bis*.1 and 90 *bis*.3, respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicants' Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-8230	Authorized officer <div style="text-align: center;"> ROSALYNN KEYS </div> Telephone No. (703) 308-0196
---	---

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: GAL EHRLICH G.E. EHRLICH (1995) LTD. 28 BEZALEL STREET 52 521 RAMAT GAN ISRAEL
--

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

Applicant's or agent's file reference 01/22753

Date of Mailing (day/month/year)	11 JUL 2002
-------------------------------------	--------------------

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No. PCT/IL01/01080

International filing date (day/month/year) 22 NOVEMBER 2001

Applicant CARDIMMUNE LTD.

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
 1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90 *bis*.1 and 90 *bis*.3, respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicants' Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer ROSALYND KEYS Telephone No. (703) 308-0196
---	---

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 01/22753	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> FOR FURTHER ACTION </div> <div> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. </div> </div>	
International application No. PCT/IL01/01080	International filing date (<i>day/month/year</i>) 22 NOVEMBER 2001	(Earliest) Priority Date (<i>day/month/year</i>) 24 NOVEMBER 2000
Applicant CARDIMMUNE LTD.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 24 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the
- ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (See Box II).

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. _____

- ☐ as suggested by the applicant.
- ☐ because the applicant failed to suggest a figure.
- ☐ because this figure better characterizes the invention.

☒ None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL01/01080

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : Please See Extra Sheet.

US CL : Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : Please See Extra Sheet.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SHAW et al. Natural antibodies with the T15 idiotypic may act in atherosclerosis, apoptotic clearance, and protective immunity. The Journal of Clinical Investigation. June 2000, Vol. 105, No. 12, pages 1731-1740.	1-22
A	SUBBANAGOUNDER et al. Determinants of Bioactivity of Oxidized Phospholipids: Specific Oxidized Fatty Acyl Groups at the sn-2 Position. Arterioscler. Thromb. Vasc. Biol. October 2000, pages 2248-2254.	1-22

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 15 JUNE 2002	Date of mailing of the international search report 11 JUL 2002
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer ROSALYND KEYS Telephone No. (703) 308-0196

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL01/01080

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BOULLIER et al. The Binding of Oxidized Low Density Lipoprotein to Mouse CD36 Is Mediated in Part by Oxidized Phospholipids That Are Associated with Both THE Lipid and Protein Moieties of the Lipoprotein. The Journal of Biological Chemistry. 31 March 2000, Vol. 275, No. 13, pages 9163-9169, especially pages 9163 and 9164.	3, 6-9, 11 and 19-22
X --- A	SUBBANAGOUNDER et al. Evidence That Phospholipid Oxidation Products and /or Platelet-Activating Factor Play an Important Role in Early Atherogenesis: In Vitro and In Vivo Inhibition by WEB 2086. Circulation Research. 20 August 1999. pages 311-318, especially pages 311-313 and 317.	3 and 6-10 ----- 12-18
A	OTA et al. Complexes of apoA-1 with phosphatidylcholine suppress dysregulation of arterial tone by oxidized LDL. The American Journal of Physiology. April 1997, Vol 273, No. 3, Pt. 2, pages H1215-H1222.	1-22
X -- Y	TOKUMURA et al. Cardiovascular Effects of Lysophosphatidic Acid and Its Structural Analogs in Rats. The Journal of Pharmacology and Experimental Therapeutics. July 1981, Vol 219, No. 1, entire document.	3, 6-8, 11, 12, 16 and 17 ----- 9, 10, 15, and 18
Y	US 4,614,796 A (KAWAMATA et al) 30 September 1986, col. 1, line 5 to col. 3, line 32.	3, 4, 6-9 and 11
X	US 5,660,855 A (MALE-BRUNE) 26 August 1997, col. 5, line 66 to col. 8, line 17.	3, 6-12 and 15-18
X	WO 95/23592 A1 (THE UNIVERSITY OF BRITISH COLUMBIA) 08 September 1995, pages 7-15.	3, 6-10, 12 and 15-18
X	US 4,329,302 A (HANAHAHAN et al) 11 May 1982, col. 2, line 10 to col. 5, line 58.	3, 6-9 and 11
X --- Y	US 4,827,011 A (WISSNER et al) 02 May 1989, col. 1, line 5 to col. 2, line 46.	1, 3, and 5-11 ----- 12, and 14-18
A	LEITINGER et al. Structurally similar oxidized phospholipids differentially regulate endothelial binding of monocytes and neutrophils. Proceedings of the National Academy of Sciences, USA. 12 October 1999, Vol 96, No. 21, pages 12010-12015.	1-22

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL01/01080

A. CLASSIFICATION OF SUBJECT MATTER:

IPC (7):

A61K 31/685, 31/215, 31/24, 31/19, 31/20, 31/12, 31/11, 31/075, 31/08; C07F 9/02; C07C 59/235, 43/11

A. CLASSIFICATION OF SUBJECT MATTER:

US CL :

514/76, 77, 78, 529, 534, 558, 675, 676, 693, 704, 714, 716, 723; 554/78, 79, 80, 81, 82; 562/578; 560/263, 264, 252; 568/305, 307, 413, 141, 423, 613, 622

B. FIELDS SEARCHED

Minimum documentation searched

Classification System: U.S.

514/76, 77, 78, 529, 534, 558, 675, 676, 693, 704, 714, 716, 723; 554/78, 79, 80, 81, 82; 562/578; 560/263, 264, 252; 568/305, 307, 413, 141, 423, 613, 622

B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

EAST, CAS ONLINE

search terms: atherosclerosis, cardiovascular, cerebrovascular, vascular, stenosis, restenosis, oxidized, phospholipid, phosphatidyl